

# UNITED STATE DEPARTMENT OF COMMERCE

**Patent and Trademark Office** Address:

**COMMISSIONER OF PATENTS AND TRADEMARKS** Washington, D.C. 20231

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE 08/650,709 05/20/96 ALBIN D 7693-002-0 **EXAMINER** QM12/1004 OBLON SPIVAK MCCLELLAND DEXTER. PAPER NUMBER MAIER AND NEUSTADT **ART UNIT** FOURTH FLOOR 1755 JEFFERSON DAVIS HIGHWAY 3724

ARLINGTON VA 22202

**DATE MAILED:** 10/04/99

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

PTO-90C (Rev. 2/95) 1- File Copy

## Application No.

Applicant(s)

08/650,709

Albin et al.

Office Action Summary Examiner

Clark F. Dexter

Group Art Unit 3724



<ul> <li>☑ Responsive to communication(s) filed on <u>Aug 10, 1999</u></li> <li>☑ This action is FINAL.</li> <li>☑ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11; 453 O.G. 213.</li> <li>A shortened statutory period for response to this action is set to expire <u>3</u> month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).</li> </ul>			
		Disposition of Claims	
		X Claim(s) 2, 12, 13, 17-19, 21, 22, 26, and 27	is/are pending in the application.
		Of the above, claim(s) 2, 12, 13, and 18	is/are withdrawn from consideration.
Claim(s)			
☐ Claim(s)			
☐ Claims ar			
Application Papers  See the attached Notice of Draftsperson's Patent Drawing Review The drawing(s) filed on	tional Bureau (PCT Rule 17.2(a)).		
Attachment(s)  Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152			

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Application/Control Number: 08/650,709

Art Unit: 3724

#### **DETAILED ACTION**

#### Continued Prosecution Application

- 1. The request filed on August 10, 1999 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/650,709 is acceptable and a CPA has been established. An action on the CPA follows.
- 2. The amendment filed July 12, 1999 under 37 CFR 1.116 in the parent application has been entered as a preliminary amendment in this CPA application.

#### Election/Restriction

3. As amended, claim 18 in its present form is directed to a non-elected embodiment.

Therefore, claim 18 has been withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected species, the requirement having been traversed in applicants' election filed July 16, 1997 (paper no. 7).

#### **Drawings**

4. The drawings are objected to because numerals 100,102 as now described on page 8, line 9 of the specification are not shown. It is noted that the proposed drawing change to add these numerals as discussed by applicants in their remarks has not been received. Correction is required.

Application/Control Number: 08/650,709 Page 3

Art Unit: 3724

5. The drawings stand objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "depressions" as set forth in claim 27 must be shown or the feature(s) cancelled from the claim(s). No new matter should be entered. It is noted that the proposed drawing correction filed July 12, 1999 addressing this issue was disapproved because applicants did not provide a basis in the original disclosure for the specific back-up roll configuration or did not state that such a back-up roll configuration is old and well known in the art.

### Claim Rejections - 35 USC § 112

6. Claims 17, 19, 21, 22, 26 and 27 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not appear to provide sufficient support for a conveying device driven separately from the cutting roll as now set forth in the claims, particularly claim 26 (line 9). Rather, support appears to only be provided for the rotational rate of the cutter being greater than the conveying rate of the gel/conveyor. There is no disclosure of how these components are driven.

W OK

Application/Control Number: 08/650,709

Art Unit: 3724

7. Claims 17, 19, 21, 22, 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 26, line 4, "longitudinal" renders the limitation vague and indefinite since it is not clear as to what is meant by "longitudinal", particularly with respect to the cutting roll, and it seems that "longitudinal" should be deleted or the like; in line 7, "hydrous polymer gel" is vague and indefinite as to whether it refers to that set forth in the preamble or to another such gel, and it seems that --the-- or --said-- should be inserted before "hydrous" or the like; in line 9, structural cooperation is lacking for "a conveying device"; also in line 9, the phrase "arranged to convey" is vague and indefinite as to how the conveying device is "arranged"; in lines 9-10, "a layer of hydrous polymer gel" is vague and indefinite as to whether it refers to the hydrous polymer gel previously set forth or to another such gel, and it seems that --the-- or --said-- should be inserted before "hydrous" or the like.

In claim 19, line 3, "the ... cross-cutting roll" lacks antecedent basis and is vague and indefinite as to what disclosed structure it refers.

In claim 22, line 1, "the group" appears to lack positive antecedent basis.

In claim 27, line 2, "which can receive" is indefinite, and it seems that it should read --for receiving-- or the like; also in line 2, "the cutting edges of ... said back-up roll" lacks antecedent basis, and further is vague and indefinite since the back-up roll is not disclosed as having cutting edges.

Application/Control Number: 08/650,709 Page 5

Art Unit: 3724

#### Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 19 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al.

Johnson et al. discloses a cutting device with every structural limitation of the claimed invention including a cutting roll (e.g., 28) having at least one cross cutting element (e.g., 48) including a cutting edge, and a circumferentially extending cutting element (e.g., 46) including another cutting edge; a back-up roll (e.g., 26); and a conveying device (e.g., 14) which is driven separately from the cutting roll (i.e., wherein the cutting roll is driven by driving means 30).

## Claim Rejections - 35 USC § 102/103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 08/650,709

Art Unit: 3724

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 21 and 22 are rejected under 35 U.S.C. 102(b) as anticipated by Johnson et al. or, in the alternative, under 35 U.S.C. 103(a) as obvious over Johnson et al. in view of Stream.

Johnson et al. discloses a cutting device with every structural limitation of the claimed invention including the back-up roll being coated with a plastic material (e.g., 36).

In the alternative, if it is argued that Johnson et al. does not specifically disclose that the coating material is plastic and more particularly the specific plastics recited in claim 22, the Examiner takes Official notice that it is old and well known in the art to provide plastic on an anvil or back-up roll as evidenced by Stream to enable the blade to press through the workpiece with sufficient pressure to cut the workpiece while not dulling the cutting edge of the blade.

Therefore, it would have been obvious to one having ordinary skill in the art to make the resilient coating of Johnson et al. from plastic including the specific types of plastic recited in claim 22, to gain the well known advantages of plastic including increased durability and reduced manufacturing costs as well as the advantages taught by Stream. Further, one having ordinary skill in the art would clearly select a common form of plastic for the well known benefits including availability.

Application/Control Number: 08/650,709

Art Unit: 3724

#### Claim Rejections - 35 USC § 103

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al.

Johnson et al. discloses a cutting device with almost every structural limitation of the claimed invention but lacks a disclosure that the cross cutters are formed of flat steel polished on one side. However, the Examiner takes Official notice that it is old and well known in the art to provide cutting blades made of polished steel to keep the blades free of contaminants and to provide a blade having a cleaner appearance. Therefore, it would have been obvious to one having ordinary skill in the art to make the blades, including the cross cutters, of Johnson et al. of polished steel for the well known reasons including those described above.

13. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. in view of Stream.

Johnson et al. discloses a cutting device with almost every structural limitation of the claimed invention but lacks depressions in the back-up roll. Stream discloses a back-up roll with depressions formed therein to receive the cutting edges of the blades of the cutter roller and teaches that this establishes a strong traction between the cutter roll and the back-up roll and further prevents wear of the backup roll. Therefore, it would have been obvious to one having ordinary skill in the art to provide depressions in the back-up roll of Johnson et al. to gain the well known advantages of plastic including increased durability and reduced manufacturing costs as well as the advantages taught by Stream.

Application/Control Number: 08/650,709

Art Unit: 3724

14. Claims 17-19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heywood in view of Williams.

Heywood discloses a device, particularly in Figures 1-4, with every structural limitation of the claimed invention including a cutting roll (F or G-G') with axially extending cross-cutting elements (e.g., "e") and radially extending longitudinal cutting elements (e.g., "c" or "d" or "I"), and a back-up roll (C) which is approximately parallel to the cutting roll. However, Heywood lacks a conveying device that is driven separately from the cutting roll. However, the Examiner takes Official notice that it is old and well known in the art to provide conveyors to move material from one work station (i.e., from storage, from a queue station, or from another processing apparatus) to another by independently driven conveyors to gain the benefits of automated operation (such as reduction of manpower) as well as the well known benefits of conveying devices such as efficient and continuous movement of material. For example, Williams discloses a conveying device (e.g., carrier belt 5) which is separately driven from the cutting device and is used to move the material onto another conveyor (e.g., carrier 3) for cutting thereof. As is well known in the art, these conveyors can be driven at any desired speed to provide a desired spacing of the material during the material processing (i.e., the speed at which material moves from one apparatus to the next is often different than that of the material through any one of the apparatus). Therefore, it would have been obvious to one having ordinary skill in the art to provide separately-driven conveyors to feed material to or from the device of Heywood for the well known benefits including those described above and further including those taught by Williams.

Application/Control Number: 08/650,709

Art Unit: 3724

Regarding claim 17, Heywood discloses flat cross cutters but lacks a disclosure that the cross cutters are formed of flat steel polished on one side. However, the Examiner takes Official notice that it is old and well known in the art to provide cutting blades made of polished steel to keep the blades free of contaminants and to provide a blade having a cleaner appearance.

Therefore, it would have been obvious to one having ordinary skill in the art to make the blades, including the cross cutters, of Heywood of polished steel for the well known reasons including those described above.

15. Claims 21, 22 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heywood as applied to claim 26 above, and further in view of Stream.

Heywood lacks the back-up roll being coated with plastic and further lacks depressions in the surface of the back-up roll. However, Heywood discloses that the back-up roll is covered with a soft material, specifically "rawhide or any other suitable material". Further, it is old and well known in the art to provide plastic on an anvil or back-up roll as evidenced by Stream to enable the blade to press through the workpiece with sufficient pressure to cut the workpiece while not dulling the cutting edge of the blade. Plastic coating is clearly a modern alternative to a rawhide coating, and the specific types of plastic set forth are common forms of plastic. Further, the plastic coating of Stream forms depressions to receive the cutting edges of the blades of the cutter roller and Stream teaches that this establishes a strong traction between the cutter roll and the back-up roll and further prevents wear of the backup roll. Therefore, it would have been obvious to one having ordinary skill in the art to replace the rawhide coating with plastic,

Application/Control Number: 08/650,709

Art Unit: 3724

particularly the notched coating of Stream, to gain the well known advantages of plastic including increased durability and reduced manufacturing costs as well as the advantages taught by Stream. Further, one having ordinary skill in the art would clearly select a common form of plastic for the well known benefits including availability.

### Response to Arguments

16. Applicant's arguments filed July 12, 1999 have been fully considered but they are not persuasive.

Regarding the prior art rejection over Heywood, applicants argue that the Examiner puts forth no motivation to provide a conveying device on Heywood which is separately driven from the cutter roller. Further, applicants provide arguments as to why such a modification would not be obvious, and further argues that the prior art, specifically Heywood, teaches against such a modification. The Examiner respectfully disagrees. The primary reason is that the claims do not limit the conveying device to that disclosed by Heywood (i.e., L), and the rejection does not modify the conveying device of Heywood. Rather, the rejection states that what would be obvious is to provide an additional, separately driven conveyor (such as that indicated by numeral 5 in Williams) to bring material to the Heywood device. Further, the Examiner clearly provides motivation for providing such a separately driven conveyor (e.g., to provide a desired spacing between the material or workpieces).

Application/Control Number: 08/650,709 Page 11

Art Unit: 3724

Regarding the rejection under 35 USC 112, 1st paragraph, applicants argue beginning at the bottom of page 5 of the amendment that the disclosure as originally filed provided a sufficient description to permit one having ordinary skill in the art to make and use the claimed invention. The Examiner respectfully disagrees. There appears to be no support in the original disclosure for the conveying device being driven separately from the cutting roll. Rather, support appears to only be provided for the conveyor moving at a slower rate than the cutting roll. As is well known in the art, through gear reduction, the conveying device and the cutting roll could be driven together (as opposed to driven separately) while achieving different conveying and cutting roll speeds. The Examiner's position is that the specific structure to provide the claimed speed difference is not disclosed.

#### Conclusion

- 17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McCort and Bemis et al. are discussed by Johnson et al. and disclose cutting devices with features related to the claimed invention
- 18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark Dexter whose telephone number is (703) 308-1404.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Rinaldi Rada, can be reached at (703)308-2187.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-1148. The fax numbers for this group are: formal papers - (703)305-3579; informal/draft papers - (703)305-9835.

Application/Control Number: 08/650,709

Art Unit: 3724

Communications via Internet e-mail regarding this application, other than those under 35 USC 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [rinaldi.rada@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 USC 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark Office on February 25, 1997 at 1195 OG 89.

Clark F. Dexter Primary Examiner Art Unit 3724

cfd September 29, 1999